
Lesnoobdelovalni stroji - Varnost - 7. del: Poravnalni, debelinski, kombinirani skobeljni stroji/debelinski stroji (ISO/DIS 19085-7:2026)

Woodworking machines - Safety - Part 7: Surface planing, thickness planing and combined surface/thickness planing machines (ISO/DIS 19085-7:2026)

Holzbearbeitungsmaschinen - Sicherheit - Teil 7: Abrichthobel-, Dickenhobel- und kombinierte Abricht- und Dickenhobelmaschinen (ISO/DIS 19085-7:2026)

Machines à bois - Sécurité - Partie 7: Machines à dégauchir, à raboter et machines combinées à dégauchir/raboter (ISO/DIS 19085-7:2026)

Ta slovenski standard je istoveten z: prEN ISO 19085-7

ICS:

13.110	Varnost strojev	Safety of machinery
25.080.25	Stroji za ploščinsko obdelavo	Planing machines
79.120.10	Lesnoobdelovalni stroji	Woodworking machines

oSIST prEN ISO 19085-7:2026**en,fr,de**

Sample Document

get full document from standards.iteh.ai



DRAFT International Standard

ISO/DIS 19085-7

Woodworking machines — Safety —

Part 7: Surface planing, thickness planing and combined surface/thickness planing machines

Machines à bois — Sécurité —

*Partie 7: Machines à dégauchir, à raboter et machines combinées
à dégauchir/raboter*

ICS: 13.110; 79.120.10

ISO/TC 39/SC 4

Secretariat: **UNI**

Voting begins on:
2026-07-08

Voting terminates on:
2026-09-30

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO/DIS 19085-7:2026(en)

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENTS AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

© ISO 2026

Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO/DIS 19085-7:2026(en)

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	2
3 Terms and definitions	2
4 Safety requirements and measures for controls	8
4.1 Safety and reliability of control systems	8
4.2 Control devices	8
4.2.1 General	8
4.2.2 Hand-held control set	11
4.2.3 Reset device	11
4.3 Start	12
4.3.1 Direct start	12
4.3.2 Start via control power-on	12
4.4 Safe stops	12
4.4.1 Stop function	12
4.4.2 Normal stop	12
4.4.3 Operational stop	12
4.4.4 Emergency stop	12
4.5 Braking function of tools	12
4.6 Operating modes	12
4.7 Tool speed	12
4.8 Failure of any energy supply	12
4.9 Manual reset control	12
4.10 Standstill detection	13
4.11 Machine moving parts speed monitoring	13
4.12 Time delay	13
4.13 Teleservice	13
4.14 Protection against corruption	13
4.15 Power-operated adjustment of surface planing infeed table and thickness planing table	13
5 Safety requirements and measures for protection against mechanical hazards	13
5.1 Stability	13
5.2 Risk of break-up during operation	13
5.3 Tool and tool fixing design	14
5.4 Tool brake	14
5.5 Safeguards	14
5.5.1 Fixed guards	14
5.5.2 Interlocking moveable guards	14
5.5.3 Hold-to-run control	14
5.5.4 Two-hand control	14
5.6 Prevention of access to hazardous moving parts	15
5.6.1 Cutter block guarding during surface planing	15
5.6.2 Guarding the cutter block and the feed mechanism during thickness planing	17
5.6.3 Guarding during mortising	17
5.6.4 Guarding of drives	18
5.7 Impact hazard	18
5.8 Clamping devices	18
5.9 Measures against ejection	18
5.9.1 General	18
5.9.2 Guards of class A, materials and thickness	18
5.9.3 Guards of class B, materials and thickness	18
5.9.4 Anti-kickback devices	18
5.10 Workpiece supports and guides	20

ISO/DIS 19085-7:2026(en)

5.10.1	General	20
5.10.2	Roller tables	20
5.10.3	Roller rails	20
5.10.4	Conversion movements in combined surface/thickness planing machines	20
5.10.5	Surface planing tables	20
5.10.6	Thickness planing table	21
5.10.7	Mortising table	21
5.10.8	Workpiece guiding during surface planing	22
5.10.9	Workpiece guiding during thickness planing	22
5.11	Safety appliances	23
6	Safety requirements and protective measures against other hazards	24
6.1	Fire	24
6.2	Noise	24
6.2.1	Noise reduction at the design stage	24
6.2.2	Noise emission measurement and declaration	24
6.3	Emission of chips and dust	24
6.4	Electricity	24
6.5	Ergonomics and handling	24
6.6	Lighting	25
6.7	Pneumatics	25
6.8	Hydraulics	25
6.9	Electromagnetic compatibility	25
6.10	Laser	25
6.11	Static electricity	25
6.12	Errors of fitting	25
6.13	Isolation	25
6.14	Maintenance	25
6.15	Relevant but not significant hazards	25
7	Information	26
7.1	Warning devices	26
7.2	Marking	26
7.2.1	Marking principles and methods	26
7.2.2	Marking content	26
7.3	Instructions for use	26
7.3.1	Instructions principles and drafting	26
7.3.2	Instructions content	26
7.4	Sales literature	27
	Annex A (informative) List of significant hazards	28
	Annex B (informative) Performance levels required	30
	Annex C (normative) Brake test	31
	Annex D (normative) Impact test for guards	32
	Annex E (normative) Noise test code	33
	Annex F (normative) Stability test	38
	Annex G (normative) Tests for bridge-type guards	41
	Annex H (normative) Resistance test for table lips on surface planing machines	43
	Annex I (normative) Kickback test	47
	Annex ZA (informative) ZA Relationship between this European Standard and the essential requirements of Regulation (EU) 2023/1230 aimed to be covered	48
	Bibliography	50

ISO/DIS 19085-7:2026(en)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 4 *Woodworking machines*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 142, *Woodworking machines - Safety*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This document is intended to be used in conjunction with ISO DIS 19085-1:2025.

This third edition cancels and replaces the second edition (ISO 19085-7:2024), which has been technically revised. The main changes are as follows:

- the way of reference from this document to ISO DIS 19085-1:2025 has been simplified, as well as its explanation in Introduction, and aligned to ISO drafting rules;
- the verification methods at the end of each subclause have been deleted, since self-evident;
- [4.2](#), [7.2](#), [7.3](#) have been rearranged, to follow the new subdivision in ISO DIS 19085-1:2025;
- [5.4](#), [5.9](#) have been simplified in structure, for easier reading.

A list of all parts in the ISO 19085 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO/DIS 19085-7:2026(en)

Introduction

The ISO 19085 series of International Standards provides technical safety requirements for the design and construction of woodworking machinery, as well as for the content of the relevant instruction handbook. It concerns designers, manufacturers, suppliers and importers of the machines specified in the Scope.

This document is a type-C standard as stated in ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (e.g. regulators, accident prevention organisations, market surveillance).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in the case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards (as defined in ISO 12100), the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

In this document, a subclause can refer to the same subclause of ISO DIS 19085-1:2025 or give specific requirements or both.

Woodworking machines — Safety —

Part 7:

Surface planing, thickness planing and combined surface/thickness planing machines

1 Scope

This document specifies the safety requirements and measures for

- surface planing machines, also called jointers,
- thickness planing machines, also called planers or single surface planers, and
- combined surface/thickness planing machines

with fixed cutter block position, with an integrated feed in thickness planing mode, with or without demountable power feed device in planing mode, with manual loading or unloading of the workpiece or both, and capable of continuous production use, altogether referred to as “machines”.

The machines are designed to cut solid wood and material with similar physical characteristics to wood (see ISO DIS 19085-1:2025, 3.2).

This document deals with all significant hazards, hazardous situations or hazardous events, listed in [Annex A](#), relevant to the machines when they are used as intended and under conditions of misuse which are reasonably foreseeable.

This document is also applicable to the other life cycle phases of the machines: transport, assembly, adjustment, maintenance, disabling, dismantling and scrapping.

This document is also applicable to surface planing machines and combined surface/thickness planing machines fitted with an optional mortising device, whose hazards have been dealt with.

This document does not apply to:

- a) machines with more than one cutter block;
- b) machines with a mortising unit driven by a separate motor;
- c) machines where the cutter block is adjustable for depth of cut setting in thickness planing mode;
- d) machines where the conversion from planing to thickness planing mode or vice versa is achieved by mounting or demounting parts or units;
- e) machines where surface planing and thickness planing can be performed at the same time;
- f) machines with more than one anti-kickback device;
- g) machines intended for use in potentially explosive atmosphere;
- h) machines manufactured prior to the publication of this document.

ISO/DIS 19085-7:2026(en)

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 148-1:2016, *Metallic materials — Charpy pendulum impact test — Part 1: Test method*

ISO 6892-1:2019, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO/DIS 19085-1:2025, *Woodworking machines — Safety — Part 1: Common requirements*

IEC 60947-5-1:2024, *Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices*

EN 847-1:2017, *Tools for woodworking — Safety requirements — Part 1: Milling tools, circular saw blades*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100:2010, ISO 13849-1:2023, ISO DIS 19085-1:2025 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

3.1

cutter block

cylindrical shaped complex tool equipped with blades or inserts

Note 1 to entry: See EN 847-1:2017 for a definition of complex tools.

3.2

surface planing machine

jointer

machine designed for cutting off layers of the lower surface of a workpiece by a *cutter block* (3.1) rotating around a horizontal axis, mounted at right angles to the feed direction between two tables designed to position and support the workpiece that is fed into the machine against the direction of the cut

Note 1 to entry: The main parts of a surface planing machine and their terminology are shown in [Figure 1](#).

Note 2 to entry: Typical working operations at a surface planing machine are shown in [Figure 4](#).

Note 3 to entry: Surface planing machines can also be fitted with an optional *mortising device* (3.7).

3.3

thickness planing machine

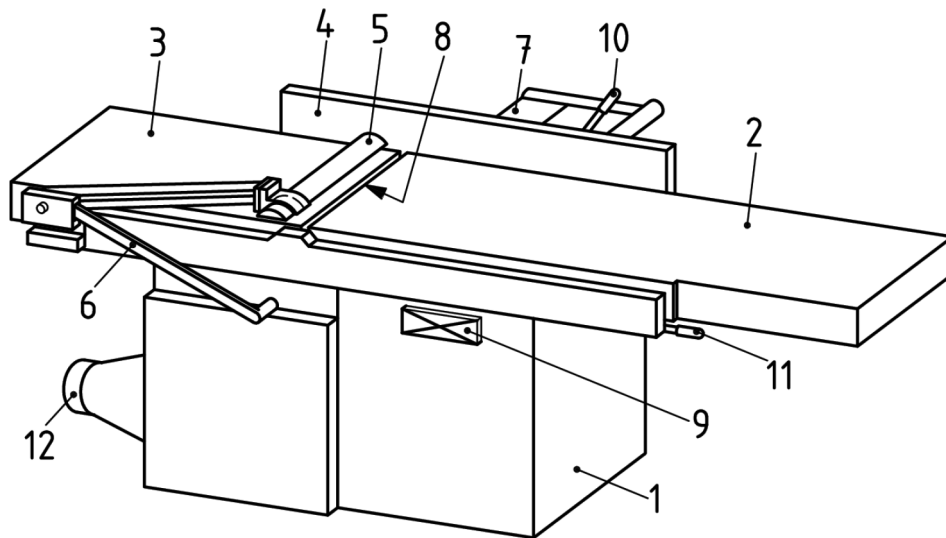
single surface planer

machine designed for cutting off layers of the upper surface of a workpiece by a *cutter block* (3.1) rotating around a horizontal axis, mounted at right angles to the feed direction above the table designed to position and support the workpiece that is fed into the machine against the direction of the cut

Note 1 to entry: The main parts of a thickness planing machine and their terminology are shown in [Figure 2](#).

Note 2 to entry: The internal structure of a thickness planing machine is shown in [Figure 5](#).

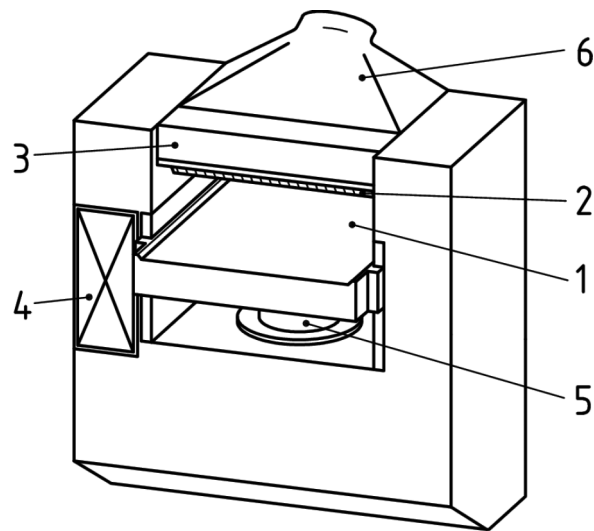
ISO/DIS 19085-7:2026(en)

**Key**

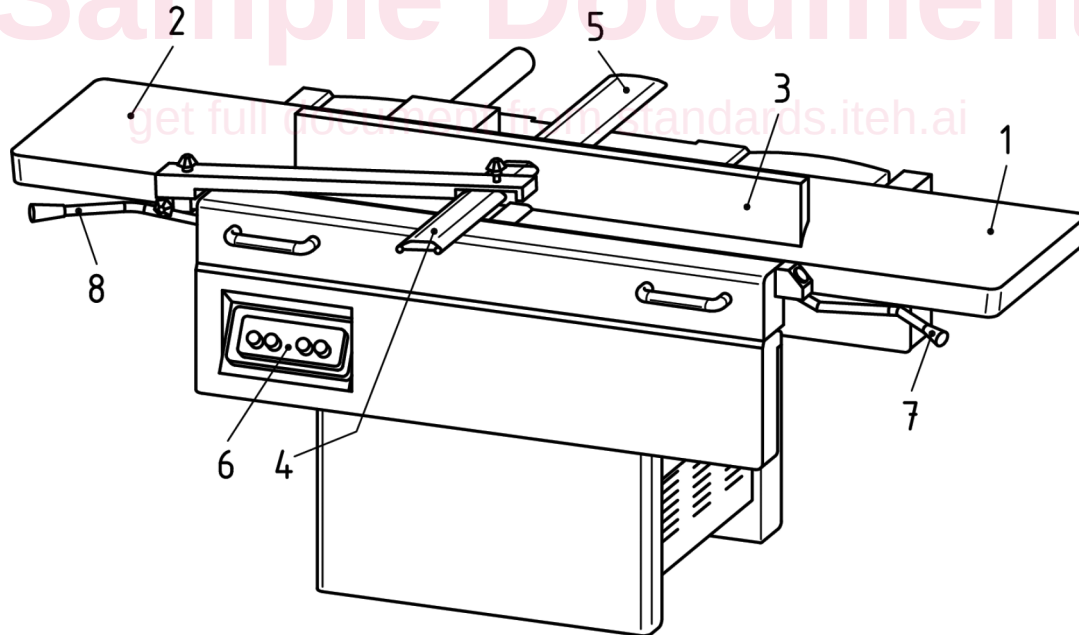
- 1 main frame
- 2 infeed table
- 3 outfeed table
- 4 tiltable fence
- 5 bridge-type guard
- 6 lever for bridge-type guard adjustment
- 7 guard behind the fence
- 8 cutter block
- 9 controls
- 10 fence tilting adjustment
- 11 lever for table height adjustment
- 12 dust extraction outlet

Figure 1 — Example of a surface planing machine

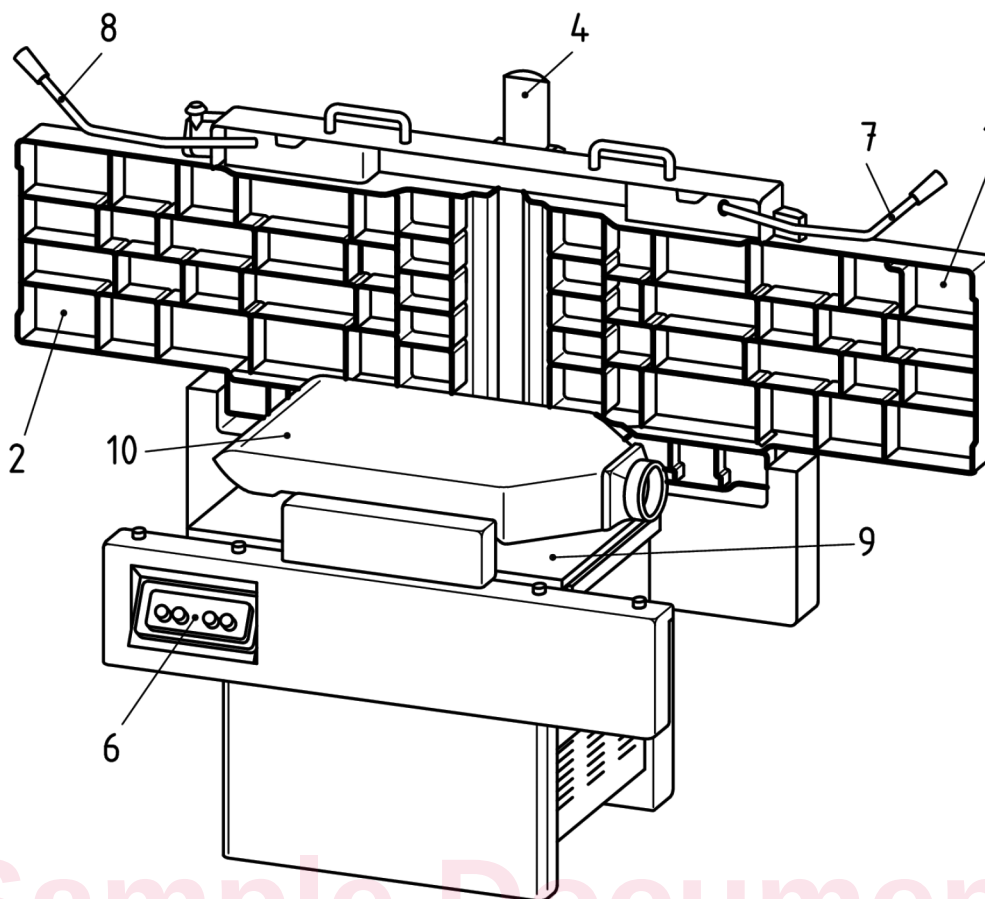
ISO/DIS 19085-7:2026(en)

**Key**

- 1 thickness planing table
- 2 anti-kickback fingers
- 3 upper guard
- 4 controls
- 5 table lifting system
- 6 extraction hood

Figure 2 — Example of a thickness planing machine**a) Set up for surface planing**

ISO/DIS 19085-7:2026(en)

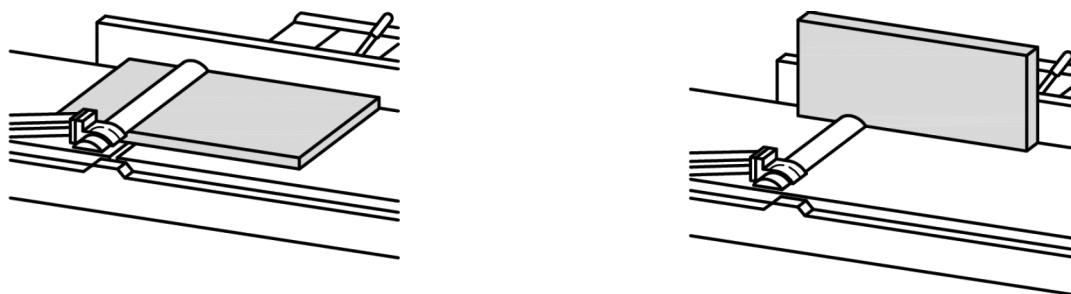


b) Set up for thickness planing

Key

- 1 infeed table
- 2 outfeed table
- 3 tiltable fence
- 4 bridge-type guard
- 5 guard behind the fence
- 6 controls
- 7 infeed table height adjustment
- 8 bridge-type guard adjustment
- 9 thickness planing table
- 10 guard for thickness planing mode

Figure 3 — Example of a combined surface/thickness planing machine



a) Planing

b) Edging

ISO/DIS 19085-7:2026(en)

Figure 4 — Typical surface planing operations

3.4

combined surface/thickness planing machine

combined jointer/single surface planer

combined machine that allows surface planing as well as thickness planing

Note 1 to entry: The main parts of a combined surface/thickness planing machine and their terminology are shown in [Figure 3](#).

Note 2 to entry: The workpiece is fed into the machine against the direction of the cut.

Note 3 to entry: Combined surface/thickness planing machines can also be fitted with an optional *mortising device* ([3.7](#)).

Note 4 to entry: During surface planing, the workpiece is passed over the *cutter block* ([3.1](#)) located between two tables which are used to position and support the workpiece and the lower surface is planed. The infeed table of the surface planing unit is adjustable in height.

Note 5 to entry: For thickness planing, both surface *planing tables* ([3.5](#)) can be raised. The workpiece rests on the *thickness planing table* ([3.6](#)); the distance between it and the cutting circle diameter is adjustable. The upper surface of the workpiece is planed.

Note 6 to entry: The internal structure of a combined surface/thickness planing machine is shown in [Figure 5](#).

3.5

surface planing tabletable in front and behind the *cutter block* ([3.1](#)) used to support the workpiece during planing of the lower surface

3.6

thickness planing table

table used to support the workpiece during thickness planing at the machine which can comprise an assembly of rollers, belts or other fixed or moving mechanical elements

3.7

mortising device

fixed or detachable element of a machine which is designed for slot boring (mortising) or boring by means of a single rotating tool and a moveable table

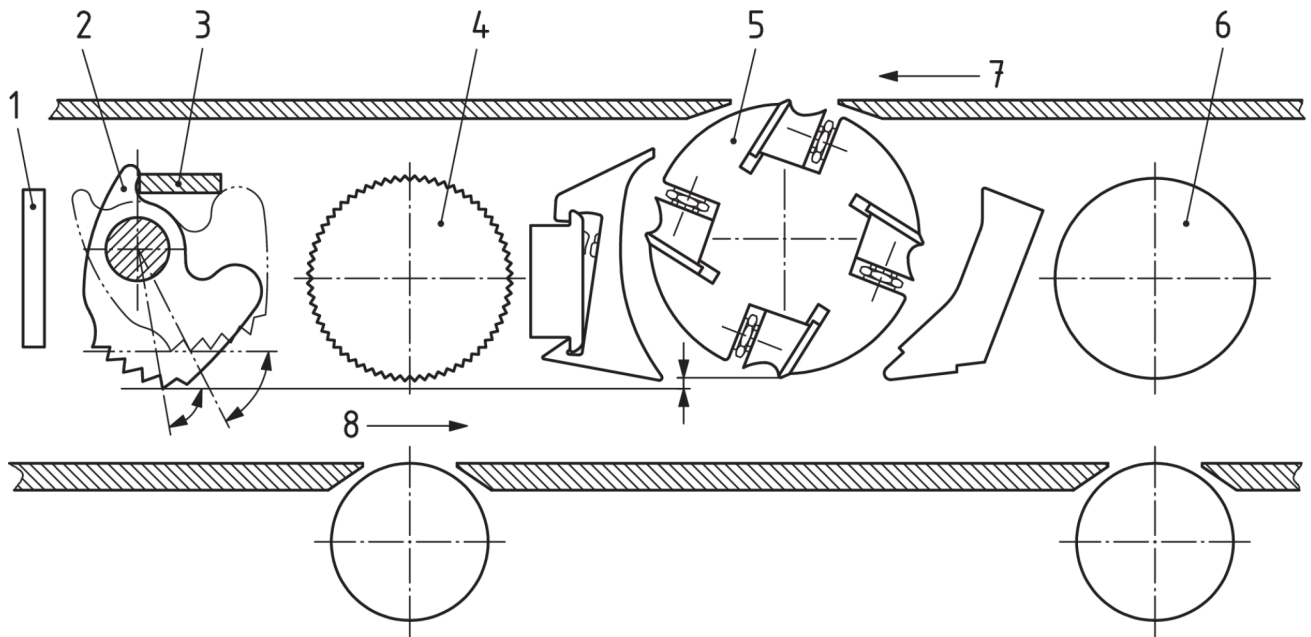
Note 1 to entry: The tool holding device, for example, chuck, is mounted on one end of the *cutter block* ([3.1](#)) (see [Figure 6](#)).

3.8

initiation control

control which, after actuation, enables providing power to specific machine actuators, for example, by a programmable logic control

ISO/DIS 19085-7:2026(en)

**Key**

- 1 limiting device for the depth of cut
- 2 anti-kickback fingers
- 3 mechanical end stop for the rotation of the finger
- 4 infeed roller
- 5 cutter block
- 6 outfeed roller
- 7 feed direction during surface planing
- 8 feed direction during thickness planing

Figure 5 — Example of the internal structure of a thickness planing machine and of a combined surface/thickness planing machine